Horse-Radish as Crop and Weed.

Your Nova Scotia inquirer who asks as to culture and marketing, says he has "been told by a pickle manufacturer that horse-radish is the most profitable crop that can be grown, as the supply is limited and the root is used as the basis of various condiments, etc." He wishes information pro and con to assist him in deciding "whether to introduce what may prove a pestilent weed." There is considerable profit in a good crop of horse-radish, and a good deal of work, too; it would be more generally raised but for the fact that the demand for it is not very large, and when the market is overstocked it is very hard to sell it; and, moreover, the roots that remain in the land after taking a crop are about as hard to kill as Canada thistles, and a good deal harder than couch grass. They can be eradicated by planting with cabbage and celery, which demand constant hoeing, so that few will remain after one season's tillage; but if neglected late in the season the roots will live many years and give a good deal of trouble, especially in grass lands.

The culture of this root for sale is confined almost entirely to the market gardens near large cities, for the reason that the land must be very rich and fine to give a good crop, and the eradication of the remaining roots after the crop is taken off demands such culture as is not easily given except upon vegetable gardens. The best land for the purpose is a deep, sandy loam, made fine and rich by several years' previous tillage and manuring. The manure for the crop is best applied in the fall by ploughing under a heavy dressing of horse-manure, say twenty-five or thirty tons per acre. Stiff or clay land will not produce so good a crop; on such soil the roots will be rough and hard to clean for market. If manure must be applied in spring it should be made as fine as possible by composting, and thoroughly mixed with the soil.

The land is prepared as early in spring as it can be worked mellow, by deep ploughing and harrowing and rolling, repeated until all lumps are reduced to the depth of eight or ten inches. The land is then thrown into ridges with a large one horse plough, making the ridges three and a half to four feet from centre to centre. The ridges are then raked down by the hand rake, and the marker run along the center of each ridge, making marks for setting the roots two feet apart; some prefer ten inches, but I think they get more small roots. The sets are simply small bits of root, about the size of a pipe stem, cut up about an inch long. They are dropped in the hole made by the marker or set with a dibble, so as to be about an inch under ground; every piece is pretty sure to grow, it is provided with as many dormant buds as a thistle root, and is about as hard to kill.

The growth is slow at first, and it is the custom of the best gardeners to use the land on each side of the ridges for a couple of rows of early beets, spinach or lettuce, which will be cleared away before the radish makes much growth; all such early crops should be cleaned up by the first or middle of July, when the horse-radish will grow very rapidly and soon cover the land with a rank growth nearly four feet high, especially if the land is low and moist. The ridging of the land is believed to favor a smooth growth of roots, and it certainly favors the early growth of the early crop grown between the rows of horse-radish, and makes it easier to dig the latter. The digging resembles the harvesting of parsnips; it is done in November for such portion of the crop as is wanted for winter sale or for very early spring, but about half the crop is usually left in the field over winter to be sold in April and May as dug. The roots are dug with a dung-fork after running a large plow as near as can be done to the row without damaging the roots. They are then stored in pits for winter sale, just as other roots.

The preparing for market is the most laborious part of the handling of this crop; the roots are trimmed with a knife of all branches and assorted into two sizes, the larger being of the size of a man's finger or larger, the smaller, down to the size of a pipe-stem, are sold separately to the pickling establishments; the larger are in considerable demand among the provision trade. Each root after being trimmed must be washed by placing it on a wash-board in a tub of water and scrubbing it thoroughly with a stiff brush, which alone will take the dirt off clean, and give the roots an attractive appearance. The large roots sell at five to seven cents per pound, and small for about one cent. The product is very valuable, depending upon the richness of the land and the moisture of the season; it will not do well on too dry land. Two to four tons per acre is considered a fair average crop.—*W. D. Philbrick, in N. Y. Tribune.*

Rapid Eating.

To boast of special skill—as some do—in the matter of eating "with dispatch," is to claim a relationship to the swine, hyena, and scavengers in general, supposed to be the most rapid eaters among the brutes. Such eating not only requires no special intellect, no superior physical ability, but is decidedly prejudicial to health, not to say unrefined.

When food is thus eaten, especially the more solid and tough, it is utterly impossible to chew it sufficiently, while it can not be properly combined with the saliva, a solvent prepared to an extent to indicate its use and importance from three and a half pounds to six in twenty-four hours. The primary object of chewing is to so divide the food that this juice may be mixed with every part, the fineness presenting an increased surface, the act of chewing acting on the salivary glands, in a kind of milking process, which, in addition to the excitement of the food, causes it to ooze out, thus affording all the liquids needed, without any artificial drinks. By this mouth-digestion, so to speak, reducing all to a moist and fine pulp, and only by such processes, can food be properly fitted for the stomach. If not well prepared for the stomach, in the mouth, the labor of that organ must be increased, doing its own, with a part pertaining to the mouth. It is proper to add that even the liquid foods cannot be so prepared unless they are retained in the mouth long enough to allow the saliva to be incorporated with them. It is also true that such masses of food as are thrown into the stomach by rapid eaters, cannot be well combined with the stomach juice (gastric,) from which fact the stomach digestion must be imperfect. The outer surface only being dissolved by the gastric juice, a part of the solid mass is likely to pass into the bowels, in an unprepared state, of course deranging them, and increasing their labors.

To say the least, rapid eating is but a preparation for our national disease—dyspepsia—as we may be the most rapid eaters of the civilized world.—*Golden Rule.*

Plant Food.

Chemists are generally agreed that plants require seven different elements from the soil in order to enable them to make healthy growth. These elements are—phosphorus, potash, magnesia, lime, sulphur, iron and nitrogen. Experiments have been repeatedly made to prove that these are essential to plant-growth. Others are often found, even in great quantity, such as silica, soda, chlorine, etc.; but as many plants have been grown to perfection without them, their presence is considered accidental, and not essential. At one of the stations in Sussex where experiments were conducted last year—namely, Hassocks Gate, the soil was particularly suitable for strictly scientific investigation, for it was a pure sand, containing hardly any traces of plant-food. On this soil turnips, even when supplied with everything except phosphate, merely lived without increasing in bulk. When ground coprolite was applied in addition the produce, even in this miserable soil, at once went up to twenty tons an acre.—*Chambers' Journal.*

—The murder of Joseph Scott, a policeman, in 1878, in Sacramento, Cal., has for a long time been shrouded in mystery. It was stated some time ago that three prisoners in San Quentin were suspected of the crime. Thomas Hamilton made a full confession a few days since, saying that he, Anderson, O'Brien and Eddie Edwards arrived in Sacramento the day of the murder. They came from Lincoln on a freight train, and determined to rob some one. They saw a man on Seventeenth street, and two of them went to hang him up, while the other two stood by to render assistance, if needed. The man was Police Officer Scott. He resisted and tried to draw a pistol, when Edwards shot him. Edwards is not yet in custody.—*San Francisco Bulletin.*